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LEADING ARTICLES

CASEOUS MAXILIARY SINUSITIS.

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INFLAMMATION of the mucous membrane of the antrum of Highmore is a common affection. In hospital and private practice it will be found that many of obscure symptoms both in the nose and in the throat are caused by the secretion and escape of pus from the largest of the accessory cavities of the nose. It is needless to say that such symptoms cannot be cured unless the sinusitis is treated. The washings from such a diseased antrum contain pus which is usually intimately mixed with the water forming a milky looking fluid or masses of thick stringy pus which usually sink to the bottom of the vessel.

In an article by Texier in the Revue Hebdomadaire de Laryngologie, d'Otologie et de Rhinologie for March, 1907, attention is called to the fact that caseous sinusitis is rare, and that the disease usually heals quickly with a few antiseptic washings of the antrum. These points were also emphasized by Luc in a communication to the French Society of Oto-Laryngology, entitled "On the Spontaneous Cure of Maxillary Antritis through Caseation of the Pus."

The symptoms and signs of the caseous form of antrum disease are very similar to those of other affections in the cavity with the exception that sometimes transillumination shows no opacity, the light reflex being as clear in one side as the other. In these cases the diagnosis is very difficult and has to be inferred from the presence of pus in the nose.

Since the disease is rare, literature on the subject is correspondingly scarce. The article in the Revue is the only one I can recall. Texier reviews briefly the histories of nine cases seen by himself and six observed by Moure. In my own practice, I recall two patients who presented typical caseous masses in the antrum; in both recovery was prompt with lavage. The odor of the pus was more foul than in ordinary antrum disease while the symptoms were practically the same. The first patient was a man, 35 years old, who was referred to me for nasal examination on account of a marked exophthalmos of the right eye. The presence of pus in the nose with no pain led to an investigation of the antrum. The cavity was punctured in the inferior meatus and washed out with sterile water. Large caseous masses were expelled; the odor was extremely fetid. Cultures from the pus showed the micrococcus tetragenus in pure culture. After a few washings with boric acid solution, the pus ceased and the antrum was apparently well; the water returned clear and the patient had no further trouble. At the time I was inclined to believe that the prompt recovery was due to the infection by the micrococcus. I feel now that this was not the case, but that I had to deal with the mild form of caseous sinusitis so well described by Texier.

The second patient, seen only a few weeks ago, was a woman, 32 years old, who had remarked for a few months the discharge of pus from the right nostril and the fetid odor of the same. Disease of the frontal sinus and ethmoid cells was excluded by packing off their normal openings. The pus seemed thicker than is usually seen in antrum disease and small caseous particles were found in it. Stein's needle was introduced in the inferior meatus and the cavity washed out with boric acid solution. Large caseous masses escaped with an ozena like odor. Much force was required to send the masses through the nor-

mal opening and the patient complained of great pain. Two days later the washing showed only two small caseous masses. At the fourth washing the water returned clear and at the present time, the patient is apparently entirely well. This case was typical caseous sinusitis. Cultures from the pus showed the staphyococcus pyogenes albus in pure culture. In an extensive hospital practice, these are the only two cases I have seen. They both belong to the mild form of the disease which yields to treatment promptly and permanently. It is in this form that transillumination does not give opacity in the affected antrum. In one of Texier's cases there was caseous rhinitis on the same side.

In the severe form of the disease the symptoms are more marked and transillumination gives distinct opacity. If the cavity is not relieved of its caseous masses, it is possible for perforation to occur either into the nose or through the canine fossa. In such cases a veritable caseous tumor forms and may be accompanied by a similar formation in the nose. Texier states that, in the severe cases, the mucous membrane of the nose may be swollen and may undergo degeneration; the presence of granulations which bleed easily, may arouse the suspicion of a malignant growth or tertiary syphilis. The only sure diagnostic method is puncture of the antrum followed by lavage. If the inferior meatus is properly cocainized, the puncture with Stein's needle causes little or no pain. The caseous masses are then washed out and the diagnosis made. Lubet-Barbon and Furet believe that caseous formations in the antrum are sometimes caused by syphilis. Viellard examined the pus histologically, and concluded that from it one could make the diagnosis of gumma. It is probable that the caseous masses occasionally form in old inflammations of the mucous membrane of the antrum. There is not much to be said about treatment. A few washings through Stein's needle suffice to cure the disease in most cases. The prognosis is much better than in cases where the pus is liquid or semisolid. According to Moure and Texier, it is seldom necessary to perform an operation, intranasally or radical, for the cure of the condition. When the diagnosis of caseous sinusitis is made, we may safely promise the patient that in all probability, the trouble will disappear under simple lavage. In my cases this was effected by means of Stein's needle with puncture in the inferior meatus. This procedure is not painful if care is taken to place the cocaine saturated pledget of cotton well under the inferior turbinate and as high as possible where the bony wall is thinnest. In other forms of sinusitis I use this method as a means of diagnosis. I would not advise it as a method of treatment in chronic antrum disease. In view of the fact that I have seen only two cases of caseous maxillary sinusitis, I thought they might prove of sufficient interest to place on record.

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EPIDIDYMITIS.—In epididymitis salicylate of sodium may be used internally and as a local application. Internally it may be used 15 grains each three hours; locally, two drachms to three ounces of distilled water. One of the very best preparations to be used as a topical application is three ounces of ichthyol to four ounces of glycerine. This is to be applied each four hours. The ordinary poultice avails little, but I have used with splendid results thick applications of antiphlogistine. If you apply it sparingly it will be a failure; it is far better to use it in the thickness of one-half inch.

THE TEXAS SANITARIUM FOR TUBERCULOSIS, located at Llano, Texas, takes pleasure in announcing that Dr. T. O. Maxwell, formerly superintendent of the Southwestern Insane Asylum at San Antonio, Texas, and for sixteen years first assistant physician to the State Insane Asylum at Austin, Texas, has purchased an interest in the Texas Sanitarium, Llano, Texas. He is now a member of the board of directors and has been elected medical director of that institution and has taken active charge of same. Dr. Maxwell is an experienced institutional man, and devoting his entire time and giving his personal attention to the successful management of this place insures its success beyond a doubt.

HOW FLEAS ARE DESTROYED IN INDIA.—Counsul-General Michael, of Calcutta, reports that the Agricultural Research Institute of Bengal, has just concluded a series of scientific experiments to determine the method of destroying fleas. A leaflet issued by the Imperial Entomologist says that the best manner of destroying fleas, with special reference to checking the ravages of plague is free use of crude oil emulsion, which consists of 80 per cent of whale oil soap. This combination makes a jelly which mixes freely with water, and is generally used at 3 per cent solution. At 10 per cent it destroys fleas with perfect certainty. It is applied to the floors and walls of houses by any garden sprayer. An animal washed with the emulsion will be entirely relieved of the pests.

SELECTED ARTICLE

SOME NOTES ON PERITONEAL ADHESIONS—POST-OPERATIVE.*

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OMAHA, NEB.

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In view of the frequency and importance of post-operative peritoneal adhesions one would naturally be lead to believe that a rich amount of literature on this subject would be readily obtainable; in this expectation, however, one is doomed to disappointment, as our literature on this subject is somewhat limited.

Should one stop to consider the various anatomical relations of the abdominal and pelvic organs, and recognize how manifestly the normal functions depend upon their natural regulating mechanisms, it is at once clearly evidenced that any factor or factors which materially interferes or limits this mobility, will bring about a disturbed function of the part involved, and may through the various nerve channels, invite a most pronounced result upon the system as a whole.

In this manner the adhesions of one portion of the peritoneum to that of another, or of one viscera to another, or to the peritoneum, will produce such an abundant and varied condition, that the secondary trouble assumes a more serious character than the primary lesion. During the time that our patients are confined to bed following the operation, and in most instances for some time after their convalescence, no special discomfort or disturbance is manifested from these post-operative peritoneal adhesions. It is only after these patients return home and take up their former duties, with increased physical exertion which such duties command, that these adhesions make themselves known. In many cases, ranging from slight dragging pains to that of severe and unbearable stitch-like pains in the region of the adhesions.

In view of the above facts the question naturally arise, What are the causes, modes of production, and methods of prevention of these adhesions?

In this paper I exclude from discussion those adhesions subsequent to primary infections preceding operation. A careful review of the factors concerned in the production of post-operative peritoneal adhesions, leads to the logical hypothesis concerning the etiology. That they are varied and most investigators are of the opinion, that where adhesions occur, after surgical procedure, they are usually the result of infection, however, they may be the result of mechanical, chemical or thermal irritation. We all readily grant that bacteria causes a leucocytosis and the exudation of a plastic lymph, from which adhesions may form. But that adhesions can and do occur without infection is equally true, as "Walthard of Berne" has proven by his experiments upon rats and rabbits. His experiments were performed with the most aseptic precautions possible. The first set of experiments being upon rabbits in which abdominal hysterectomy was carried out, exposing the peritoneal surfaces of the utero-vesical pouch to the air, but avoiding contact with sponges, hands of the operator, and other foreign material; in every case adhesions in the utero-vesical pouch resulted. Following closely upon this, he operated upon six rabbits, turning the uterus out of the wound, protecting the peritoneal surfaces with gauze pads. Necropsy examination six days later showed no adhesions and no exudate was thrown out. Turck in his experiments upon lower animals found, that non-pathogenic bacteria became pathogenic upon the exposure of the peritoneum to dry air, and that moist air maintained the normal resistance of the membrane.

Harris has proven by extensive experiments on lower animals, that bacteria, which are not pathogenic when the endothelium is normal, become pathogenic after slight traumatisms of the peritoneum; even though no microscopic lesion is apparent. Senn by elaborate experiments has proven that adhesions between serous surfaces are rapidly produced in from four to twelve hours. The forerunner of these adhesions was an exudate of plastic lymph, which united the serous surfaces.

In addition to the above factors, shock, loss of blood, foreign bodies, such as drains, washing out of the abdominal cavity with solutions, which in themselves wash off the endothelium, traumatisms of the peritoneum by retractors, unnecessary handling, exposure to the air, leave abraded surfaces uncovered by peritoneum, and certain surgical procedures which, in themselves, are productive of adhesions. Especially illustrative of this is the Heineke-Mikulicz operation for carcinoma of the stomach, in which the fixation of the pylorus brought about by subsequent adhesions, has put this particular operation out of the field of desirable surgery. There are a few patients that have a tendency to the formation of adhesions, just as many individuals have to the formation of keloids following injuries. The individual tendency towards adhesions is fully illustrated by a pa-

*Read before the Medical Society of the Missouri Valley at Council Bluffs, Ia., September 7, 1906. Reprinted from the Medical Herald.

tient, on whom Dr. J. B. Murphy, of Chicago, operated for the fifteenth time for peritoneal adhesions following an operation for chronic appendicitis. This patient, in each instance, was able to locate the exact site of the adhesion in his abdomen.

The abandonment of ligature en masse, so universally practiced a few years ago in operation upon the female genitalia has had much to do with the reduction of the pelvic peritoneal adhesions. The separate ligation of the vessels, with the covering of all abraised surfaces, is an indispensable requisite, entoilette, of the abdomen, and is never lost sight of by the skilled and conscientious surgeon of today. Another important factor in all abdominal surgery, is the careful attention to the application of ligatures, as it is not essential that a ligature in order to fulfill its purpose should be drawn so taut that it will strangulate the tissues, as this in itself is productive of certain localized factors, which frequently form the nuclei for subsequent adhesions. The type of ligature, also, is an important factor, silk ligature having no place in intra-abdominal surgery, as they frequently act as mechanical factors and thus stimulate and invite infection. The inverting of the cut edges of the peritoneal surfaces, as ordinarily practiced, in many instances is the starting point of a later parieto-abdominal adhesion.

The pathology of post-operative peritoneal adhesions in itself is simple, as we all readily agree that wherever bacteria are present we get an inflammation, which is characterized by an excessive amount of leucocytosis, and this in return is productive of an exudate, with the subsequent deposit of embryonic connective tissues in and around the area of surgical trauma. This embryonic deposit of connective tissue, in the absence of infection, is usually the result of disturbed circulation, as a thoughtful review of the intra-abdominal circulation, readily leads us up to the fact that, let the operation be what it may, a pyosalpinx, hydrosalpinx, hysterectomy, appendectomy, stomach or gall-bladder, we are at once confronted by an interruption in the arteriovenous circulation brought about by the ligation of the arterial supply of the part. This implies the establishment of a subsequent collateral circulation, and following immediately upon this we have our circulation overfilled as the result of congested neighboring structures. Hence greater liability to the production of exudates and adhesions. Thus it is easy to appreciate how an overfilled venous circulation, in the presence of an exudate, with the deposit of more or less embryonic cells, may become organized tissue, uniting one pelvic viscera to another or to contiguous structures. In traumatism produced by retractors, rough handling and thermal exposure, we immediately get a hyperemia of the part, followed by exudation of the constituents of the blood with fibrin. Organization of tissue rapidly follows.

In man the site of predilection of adhesions is found more often in the ileo-cecal region, than in any other intra-abdominal location. As a general rule there is to be found a broad parietal adhesion, especially if there has been a drain used.

Symptomatology. — Careful observation leads one to believe that the complex symptomatology of post-operative peritoneal adhesions may vary from that of a slight sense of discomfort to that of a condition more distressing and probably more serious than was the original condition for which we operated. Under ordinary conditions these patients experience little or no inconvenience from these adhesions for some weeks or months, possibly years, following the time of operation. At this time they gradually become conscious of more or less pain or discomfort at the site of the adhesion, the pain ranging in character from that of a dull aching pain to that of an intense lancinating pain, the character and degree of pain depending upon the location of the adhesion, the viscera involved and the firmness of the adhesion. If the adhesion binds down and interfers with the pelvic contents they usually present a distressing and painful picture, with which the ordinary operator is only too familiar. On the other hand, if the bands of adhesions are around the intestines, interfering with peristalsis and narrowing the caliber of the intestine, this will usually produce pain, constipation, and in many instances intestinal obstructions which is ofttimes fatal. Gall-bladder and stomach adhesions usually give early evidence of themselves and produce the well-known train of symptoms, such as pain, distress after eating, vomiting, gastrectasis and retention. The ultimate ending of these conditions the surgeon is usually called upon to treat.

Treatment.—My personal observation of post-operative peritoneal adhesions leads me to believe that there are but two rational courses of procedure—that of prophylaxis and that of ultimate surgical interference. In the former line of treatment lies our main anchor sheet; for it is only too well known to the average surgeon, that where once we have the formation of adhesions between the abdominal viscera, or between the peritoneum and the viscera, we are immediately confronted with a condition that taxes our best efforts to remove, and there is always a cer-

tain element of danger that they may recur even after radical procedure.

Prophylaxis.—All patients who are to undergo an operation should, as far as lies in our power, be put in the very best condition possible, before operation is attempted. First.—They should receive a thorough purgation. The most rigid asepsis must be carried out in every instance, and certain principles should guide the operator in the making of his incisions. The incision, so far as possible, and especially that of the peritoneum, should be a clean incision, and sharply defined; no fraying, stretching or tearing of the edges. As soon as the abdomen is opened, the viscera should be immediately protected by gauze pads, no unnecessary or rough handling of any of the abdominal contents should be practised. All incisions should be adequate in length, and in most cases there is ordinarily too much traumatism to the peritoneum, by the pulling and replacing of the ordinary retractors. I think the stationary abdominal retractor does the least harm and eminently serves the purpose. Too much stress cannot be laid upon the importance of covering with peritoneum all the abrasions made in the peritoneal cavity.

Robert T. Morris advocates covering of all abraded surfaces with dithymol-di-iodide, claiming that the powder is insoluble in serous exudate, and that in conjunction with coagulated lymph forms a protective covering. The same author advocates the use of cargile membrane, claiming that it does not allow of suppuration, causing slight disturbance of the peritoneum and soft adhesions which are absorbed in a short time. It is now universally admitted, that the use of the most antiseptics in the peritoneal cavity, through their irritation of the endothelium of serous covering, predisposes these surfaces to infection and subsequent adhesions, hence they should not be made use of. As all blood-clots invite infection and may become organized tissues, they should be thoroughly removed. When working in the pelvis the Trendelenburg position should be utilized; as the position removes the upper abdominal contents from the field of operation, thus lessening the trauamtism and shock due to handling. Only ligatures of an absorbable nature should be used within the abdomen, as when silk or ligature of a similar nature are used, they frequently form a nucleus for future trouble. In the operation for the removal of pus tubes should the tubes be excised clear into the cornu of the uterus. If we fail to do this we frequently leave an area of infection behind.

When ligating a vessel do not combine an unnecessary amount of tissue in the ligature, but rather ligate the vessel separately. It is not essential that ligatures should be drawn so taut as to strangulate the tissue.

In the closure of the peritoneum follow the plan of everting the cut edges of the peritoneum. In this manner of closure we leave no raw surface projecting into the abdominal cavity, thus minimizing the danger of the formation of an adhesion at this point, as so frequently takes place.

The after-treatment of these cases is of paramount importance in preventing the formation of future adhesions. The abdominal straps or binders should not be too tight, as they have a tendency to compress peritoneal contents, thus favoring adhesions. These patients should be allowed to change their positions at frequent intervals; early catharsis should be sought as early peristalsis antagonizes the formation of adhesions. In all these cases the period of actual bed confinement should be much longer than is ordinarily insisted upon by the average surgeon of today. All peritoneal adhesions do not demand radical procedure, as adhesions that are soft in character may be absorbed. Again adhesions frequently exist between the intestines without causing any discomfort or interference with their function. But where the adhesions demand attention they are best treated by ligation and covering of the stumps with peritoneum where possible.

Where the abraised surfaces are too extensive to allow of covering with peritoneum I use the actual cautery, as this method combines both speed and disinfection, also the smearing tends to leave a smooth surface.

In conclusion, let me say that I am thoroughly convinced that as we intelligently educate ourselves to the study of the causes of post-operative peritoneal adhesions, existing in patients on whom we have apparently performed a skillful and successful operation, the more need we will find for intelligent prophylactic measures, and the more gratifying will be the results of surgery, both to the patient and to the operator.

A deep ulceration of the fauces or tonsils should not be diagnosed as specific without examining the blood to exclude acute lymphatic leukemia.

THE Medical College of Alabama has become the Medical Department of the University of Alabama under the control and and direction of the university board of trustees. By an act of the Legislature it receives an appropriation of $45,000 and in addition $5,000 annually.

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OFFICIAL TRANSACTIONS.

CASE OF GASTRIC ULCER IMPROVED BY MEDICINAL AND DIETETIC TREATMENT.*

PETER J. WEBER, M. D., PH. G.

ST. LOUIS, MO.

Admitted December 28, 1906, 1.30 p. m. Name, W. F.; age 38; male; negro. Social condition single. Occupation teamster and houseman. Nativity Arkansas.

Habits.—Drinks whiskey to excess, especially so when present trouble started. Smokes and chews tobacco moderately. Moderate user of coffee and tea; no drugs. Sexual habits excessive. Eats fast; regular hours for eating and sleeping. Drayage teamster for seven years. Last three years houseman.

Family History.—Negative, no history predisposing or hereditary diseases.

Personal History.—None of usual children's diseases. Typhoid fever 1892, good recovery; malarial fever. Chancroid 1904, shot in left hip and right knee, good recovery. Three years ago while hauling barrels, his former occupation, he had attacks of pain in epigastric region, accompanied by slight vomiting and sour eructation. The pain seemed to occur after taking food, aggravated by the jolting of wagon. Trouble became so persistent that he had to quit the work of hauling. Changed his occupation to houseman in private families three years ago; he has been almost free from these symptoms until three months ago.

Present Trouble.—Then began having pain in the epigastric region, localized in small area about 5 cm. below xiphoid cartilage, right of median line. This pain, brought on by eating solid food, began about one-half to one hour after its ingestion. Patient says he has noticed that when any food is taken into stomach, when pain is present it seems to stop for a few minutes. But within about half hour it becomes much worse, is of a gnawing, tearing character. The pain is often accompanied by vomiting. Vomitus, he says, was of a dark coffee ground appearance. The day before coming into hospital says he vomited dark colored vomitus streaked with fresh red blood. Pain usually extends outward along the right border of ribs, and of late he has noticed it extending to the back, especially to a point on the left side of spinal column opposite twelfth dorsal vertebra. Abdomen soft, marked tenderness on pressure over epigastric region, especially below xiphoid cartilage on deep pressure. No mass palpated. Complains of sour eructations and constipation. Stools at times are of black tarry consistency. Tongue yellowish brown coat, moist, pale. Teeth and gums in good condition. Liver dullness normal. Spleen not palpable. Rectal examination negative.

Physical Examination.—Moderately well developed mulatto; good musculature, skin soft, no edema or glandular enlargements. Sclerous clear, mucous membrane, anemia. Scars on left hip and right knee. Good facial expression. Height 5 feet 7 inches; weight 140 pounds.

Respiratory apparatus, negative.

Circulatory apparatus negative,

Urinary apparatus negative.

Urine Analysis.—Clear, amber, acid; sp. g. 1022; no albumin; no sugar; no casts; indican plus.

Nervous System.—Station and gait good; pupillary reflexor normal No girdle sensations, all reflexor normal. None of special sense involved.

Diagnosis.—Gastric ulcer.

Prognosis.—Guarded.

Treatment.—Nutrient enemata once daily, toast, milk, eggnog and gruel three times daily. Sodium bicarbonate, gr. xx; peppermint water, ʒiv, four times daily. Rest in bed. Ice bag to abdomen when in pain.

January 4.—Light diet, vomited about 300 cc. Filtrate 175 cc. Positive congo red. Acid to litimus. Positive amidoozobenzol. Total acids 75. Free HCl 65. No blood microscopically.

Stomach tube was never used in this case to avoid perforation or hemorrhage.

January 5.—Lime water added to his milk, nutrient enemata continued; feels good most of the time, occasionally complains of pain at

*Read at the meeting of January 17, 1907.

pit of stomach; relieved by sodium bicarbonate. Stools free from blood macroscopically.

January 7.—Milk discontinued because it forms large curds, which irritate stomach, cause nausea, griping pains followed by vomiting, which relieves pain each time. Pain continuous, to occur about one hour after meals. Diet: eggnog, lemon, albumin and beef tea by mouth. Nutrient enemata twice daily preceded by laxative enema. Vomited this evening, clear sour vomitus, no coffee grounds or free blood macroscopically.

January 10.—Complain of monotony of diet. Feels improved.

January 12.—Continues to improve; complains at night when stomach begins to burn, relieved by sodium bicarbonate and peppermint water. No vomiting; stools free from blood. Same diet as January 7.

January 16.—Attempt was made to make a skiagraph of ulcer. Empty stomach in morning, patient was given four drachms of bismuth subnitrate three hours before X-ray exposure, in order to allow bismuth to be removed from stomach wall, and remainder adhering to ulcer. Unsuccessful.

January 17.—Another attempt with two hours before X-ray exposure failed to show ulcer; transverse colon and both flexure well shown on skiagraph. Toast has been added to January 7 diet. Feels good.

January 19.—Semi-liquid diet, toast, soup, eggnog, lemon albumen gruel, poached eggs. Sodium bicarbonate and peppermint water continued. Nutrient enemata eliminated. No pain on deep palpation over stomach.

January 22.—Full diet, soup, gruel meal, bread, milk, potatoes, etc. No further trouble, patient allowed to walk about grounds.

January 24.—Requested discharge against our advice; asked to report if any symptoms develop. Patient left free from all pain or eructations after eating.

GASTRIC ULCER WITH PRESENTATION OF CASES.

D. P. McMILLAN, M. D.

ST. LOUIS.

In presenting these cases it is with the hope of encouraging discussion on diseases of the stomach. The patients all gave a clear history of gastric disturbance. The operations on these cases were performed by Dr. John Young Brown, and were not undertaken until the patient had been given the benefit of medicinal and dietetic treatment.

It may suffice here only to give synopses of the cases.

Case I.—Patient entered the hospital suffering with a varicose ulcer of the leg. Patient is six feet tall, weighing about 140 pounds, emaciated, face thin and sallow; forty-eight years of age.

In September of 1905, began to complain of stomach trouble, and had burning sensation in his stomach, especially after eating coarse food. Later, the pain became of a dull character, and was localized in the epigastrium. He was troubled with constipation, anorexia, and disturbed sleep. Began to vomit, usually at night. At first the vomitus was brown in color, but later it had a coffee-ground appearance. Could digest no solid food, and had to resort to a milk diet, but vomiting persisted. He became very weak, lost twenty-five pounds in weight.

Previous attacks of stomach trouble he thought were "bilious" attacks.

There was family history of cancer.

Upon examination of the abdomen, the muscles were found lax, and the vertebral column could easily be palpated. No tumor could be felt, and no dullness on percussion, but there was pain on pressure in the epigastrium. There was rather marked arteriosclerosis. Second aortic sound was accentuated, but no other circulatory changes noticed.

The stomach was filled with water. The lower line of stomach reached within two inches of symphysis, and this was also the case when the stomach was inflated with air. Even under these tests no tumor was palpable.

Stomach analysis was made on two occasions. First test: Reaction acid to litmus; hydrochloric acid present; lactic acid absent; total acidity 75. Second test: Acid to litmus; hydrochloric acid present; lactic acid absent; total acidity 73.

Blood examination: Leucocytes, 6,900; erythrocytes, 4,160,000; hemoglobin, 70 to 80%.

Urine analysis showed neither albumen nor casts.

Diagnosis of carcinoma of the stomach was made, and the patient recommended for operation.

At operation it was found that a new growth was present in the region of the pylorus. This growth involved the lower end of the stomach, also the duodenum, and the mass was adherent to the pancreas, so that its removal was inadvisable. A posterior gastroenterostomy was done after the method of Monyhan. Abdomen was closed in layers.

Patient made an uninterrupted recovery. Has improved greatly after the operation, and has been for some time on full diet.

CASE II.—This patient is 54 years of age, weighs 150 pounds, is very well nourished. For some time, he suffered with eructation of gas, and has had pain of a dull character around the left breast. This pain comes on usually about thirty minutes or an hour after eating; free from pain in the morning before breakfast. He has noticed that his stools were of a dark color, and this condition was noticed at one time a year ago. He had vomited a considerable quantity of blood, and after that he was greatly prostrated. Latterly, he had not vomited much.

Upon examination the stomach was found tympanitic on percussion. Outlines could be readily determined, and was of apparently normal size. There was marked tenderness on pressure, but no paplable mass was found.

Following the second attack of gastric hemorrhage, patient was recommended for exploratory operation.

On operation pylorus was found thickened, and two cicatrices, one on the lower border near the pyloric orifice, and one, on the lesser curvature, were noticed. A posterior gastroenterostomy was performed in this case.

Patient recovered nicely from the operation, has gained steadily in weight, and has had no recurrence of his previous gastric symptoms.

CASE III.—Patient entered the hospital with the symptoms of malaria. Spleen was palpable, complained of headache and lack of appetite, had chills followed by fever.

Blood examination: red cells, 5,040,000. Differential count—polynuclear, 55.5%; lymphocytes, 41.5% eosinophiles, 2.5%; transitional, .5%. Widal, negative.

Patient was treated for some time for malaria, but the improvement in his general condition was slow. After two months the gastric symptoms became very pronounced.

He vomited usually about ten minutes after each meal, even after taking milk. Bowels costive. Patient had also severe pain in the epiagstrium. At this time patient's temperature was normal, but he was steadily losing in weight. The stomach was inflated, and not found to be abnormal and no mass was made out. The symptoms were such that diagnosis of pyloric obstruction was made, and patient recommended for operation.

At the operation the pylorus was found enlarged and thickened. A posterior gastroenterostomy was performed. The patient made a slow convalescence, but was greatly relieved after the operation. He gained in weight, and was able to leave the hospital.

CASE IV.—This girl was 23 years of age. Gives a luetic history, and has been vomiting persistently for some time. Is greatly emaciated. Patient vomited a considerable quantity of blood, and vomited shortly after each meal. Even water was borne with great difficulty. There was intense pain in the epigastrium.

In epigastric region in median line, there is a tumor-like mass which is distinctly visible and palpable on pressure, and elicits pain, which is more severe in the median line than elsewhere.

The patient's condition was so serious that she was recommended for operation.

The abdomen was opened through right rectus muscle. Stomach was found dilated, and pylorus thickened, and distinct ulcer palpable. Posterior gastroenterostomy was performed. After operation patient vomited blood, but this condition was relieved after a few days. She began to take nourishment, and was improved greatly. She has had no return of her former trouble.

The cases are herewith presented for your examination and inspection.

DISCUSSION.

Dr. W. H. Rush.—Diagnosis—Subjective Symptoms, Pain.—This is the most constant and important subjective symptom. The pain in the typical case is closely connected with the taking of food. It varies in intensity with the nature of the food, being more intense after coarse food than after liquids, and is almost invariably more severe after a full meal than after a small meal. Bland liquids are often tolerated when solid food cannot be borne at all. Hot drinks or ice water also often cause pain. The pain usually begins within twenty or thirty minutes after food is taken into the stomach. It may begin immediately. It may begin an hour, two hours or even five hours after eating. The duration of the pain is variable. It usually increases in severity for a half hour or more, and then gradually diminishes as the stomach is partially emptied (at times by vomiting), when the patient enjoys reasonable comfort until the next meal. The pain is usually of a boring or gnawing or grinding or cramping character beginning in the epigastrium, often radiating downward into the lower abdomen, or upward behind the sternum, or into the loins, or into the back, or even into the arm. It may be paroxysmal in character, accompanied by mild symptoms of collapse. Sometimes the pain in the back or under the shoulder is more annoying than the stomach pain. The pain is by no means always of severe quality. It may consist only of a slight gnawing or fullness or pressure. There may be only a vague sense of discomfort in the epigastrium that is not described as pain at all. The pain may

be felt only behind the sternum, or across the lower anterior thoracic region. The pain may be felt chiefly when the stomach is empty, or it may seem to the patient to be independent of eating. It may be felt in the night, when stomach pains are usually not troublesome.

Vomiting.—This is by no means constant, and as a diagnostic sign is greatly overestimated by many physicians. When present it usually takes place at the height of the paroxysm of pain after the chief meal of the day, and brings immediate relief. The vomitus consists of more or less digested food with considerable mucus.

Nausea precedes vomiting, but may be present without the latter.

Vomiting of blood is so infrequent that its absence should have little diagnostic importance. Profuse hemorrhage is not as a rule connected with the paroxysm of pain. It may occur hours or days after a severe paroxysm, in the midst of comparative well being, or in the night when the patient is quiet in bed. It may occur in cases in which there has been no vomiting of food, no pain, and no other pronounced ulcus symptom.

Appetite.—The appetite is usually good, except in severe cases of long standing, with much loss of weight and strength. It does not follow, however, that the patient eats sufficiently. It is very characteristic of ulcer that the desire for food is present, but that the patient refrains from eating on account of the anticipated pain. The appetite is sometimes abnormally increased.

Constipation is frequent. Diarrhea or diarrhea alternating with constipation is rare.

In severe cases, as in other disease accompanied by discomfort and pain and disturbed nutrition, the patient may become markedly neurotic, or neurasthenic. The strength and weight are often fairly well maintained, and patients sometimes suffer for many years without being obliged to give up their ordinary vocation. The course of the disease, while chronic, is variable, and intervals of comparative well being alternate with periods, weeks or months long, of severe distress.

Objective Symptoms.—Tenderness on pressure is an important symptom. Patients will often speak of "soreness" in the stomach, of their inability to wear a corset or belt, or of pain on bodily exertion or jolting. Sometimes even the weight of ordinary bed clothing is painful. The typical tenderness of ulcer is circumscribed in the epigastrium near the ensiform cartilage, or midway between this and the umbilicus. The degree of tenderness varies from slight, such as may be present in simple gastritis, to such that slight indentation of the skin, or even lightly stroking the skin with the finger, will make the patient wince with pain. Another tender point present in about one-third of all the cases is situated posteriorly beside the vertebral column, usually to the left of the spine of the twelfth dorsal vertebra, or a little higher.

Examination of the Stomach Contents or Vomitus and Feces.—The acidity of the stomach contents after the Ewald-Boas test meal is usually high, reaching at times three-tenths, four-tenths, or even five-tenths of one per cent. On the other hand, the acidity is often normal, or below normal. The acidity of the vomitus is much reduced by the presence of the large amount of mucus and saliva mixed therewith, and is a poor guide to the actual acidity of the gastric juice. The percentage of acid in the stomach contents or vomitus is of no great value in the diagnosis of ulcer. It is true, however, that the presence of normal or increased acid speaks for ulcer rather than malignant disease in doubtful cases.

Blood, when present, is a diagnostic sign of great value, provided of course that other sources of bleeding are excluded. As a means of demonstrating blood chemically, I prefer the guaiac test. The test is exceedingly delicate, and if properly made is perfectly reliable. This test should be applied to the stomach contents or vomitus in every case where ulcer is remotely suspected. For in some instances the bleeding is so slight that it would otherwise escape detection. Furthermore, other substances, such as chocolate, or red wine, which may be present in the vomitus, so closely resemble blood that they are often mistaken for it, by both patient and physician. If there is bleeding into the stomach, blood will be found also in the feces, and may give them the characteristic tarry appearance. Even light, or clay colored stools are sometimes shown by the guaiac test to contain traces of blood. Traces of blood along with other symptoms of ulcer are just as significant as profuse hemorrhage.

I have spoken of the examination of the stomach contents after the Ewald-Boas test meal, obtained of course by means of the stomach tube. I prefer to emphasize, that in cases of known ulcer, or if ulcer is strongly suspected, the stomach tube should in no circumstances be used. I have known of a case in which fatal perforation of an ulcer occurred on the day following the introduction of the tube, and another in which a patient, who had had either vomiting or hematemesis, was seized with a violent hemorrhage twenty-four hours after the same procedure.

Dr. Francis Reder.—It is to be expected that the condition of gastric ulcer would first be in the hands of an internist, because a patient with a pain in the stomach would invariably consult an internist. I do not think that the surgeon would have the good fortune of being consulted first.

Much emphasis must be placed upon the condition of pain. It is the pain that will invariably cause the physician to ask a surgeon to see his patient.

When a surgeon is called to see a case of hemorrhage from the stomach presumably due to an acute ulcerative process, the temptation to operate is great. The surgeon will recall to himself the sinister outlook that usually crowns such an operative procedure; he will also recall to himself that recovery generally ensues under medical treatment. It is not the copious hemorrhage, but the recurrence that makes an operation really imperative. A gastroenterostomy will usually cause the hemorrhage to cease. The ulcer will eventually heal. According to many of our foremost authorities on gastric surgery, search for the bleeding point is strongly advised against, and I believe any of us who have had occasion to open a stomach for a spurting artery somewhere within its folds, are willing to give the same advice. Surgical treatment may be resorted to when there is danger of perforation (a diagnosis that is more a conjecture than a fact), or when the perforation has taken place.

Surgical intervention is strongly advocated in chronic ulcer, causing repeated hemorrhages. Furthermore, in the sequelae of chronic ulcer, namely, perigastric adhesion, disabling the motility of the organ; cicatricial contractures, causing mechanical obstruction in the pylorus and malformations due to hourglass contractions.

Coming back to the question of chronic ulcer causing hemorrhage—suppose we are called to operate on a patient suffering from such a condition, and it is not at all improbable that such a lot may fall to the surgeon. We open into the cavity of the stomach on a point most suitable to the surgeon. We find no ulcer, but lots of blood, blood that is replaced as soon as it is removed. What can be done when confronted by such a condition? Continue the search for the bleeding surface? No. Would it be an encouraging condition to perform a gastroenterostomy? No. We would treat this hemorrhage like any other that is obscure. We would tampon, hoping by this procedure to save the patient's life.

I wish to state a case of profuse hemorrhage from the stomach that came under my care eight years ago. Mr. H., an engineer on night duty, had a bellyache. He ran a switch-engine near the river front. From one of the men whom he knew on a ferry boat he asked for a drink of whisky. A bottle was handed him, and he took a good drink. He was almost immediately seized with the most agonizing pain in his stomach. It was then discovered that the bottle contained oxalic acid in solution, a mixture used to clean the brass on the boat. The man was taken to the City Hospital. The following day he was removed to the Mo. Baptist Sanitarium.

The patient suffered such large losses of blood by vomiting that he was almost exsanguinated. After all therapeutic measures had been tried to check the bleeding I opened the stomach. The mucosa was intensely congested. The blood seemed to ooze from the entire surface. I tamponed the organ with gauze saturated in olive oil and sewed the wound margin of the stomach to the margin of the abdominal wound. On the third day the dressing was changed. There was but little bleeding after a few hours of so-called rest, during which the patient was permitted to drink water, the stomach was again packed with gauze saturated in olive oil. On the sixth day the gauze was removed. No further tamponade was necessary, all bleeding having ceased.

This patient made a good recovery, excepting that he complained of much pain when the stomach was attached to the abdominal wall. I promised to make an attempt to relieve him of this pain, but he left the city. Five years later I heard from him. He still had the pain, but not so severe.

In treating gastric conditions with therapeutic, hygienic and dietetic measures we wish to support the one essential feature —rest. It appears, however, that the secretions of the stomach that are constantly accumulating, affect this potent factor, rest, by their irritating qualities, thereby defeating to a considerable extent the object we have in view. By draining off these accumulated secretions of the stomach more effectively, thereby removing the irritating cause, more absolute rest for the stomach can be secured and a more promising prognosis for the stomach lesion can be entertained.

THE NON-SURGICAL TREATMENT.

Dr. Charles Shattinger.—I only hope to emphasize the principles that are frequently forgotten in the handling of these cases. Dr. Rush gave the keynote of the treatment; that is, rest. This, I think is not properly understood in the treatment of gastric ulcer. The patient is put to bed and food withheld absolutely from the stomach for a variable

length of time, for several days or a full week. During this time, food should be given by the rectum and given prepared in such a way that it will be assimilated. It is harmful to give even broken ice or water by the mouth, in a severe case. It is possible to withhold absolutely all nourishment for days if a pint of water be given from time to time by the rectum. When ready to give food by the mouth begin tentatively and proceed cautiously and very gradually from albumin-water, through gruels and thickened soups to a light diet of soft foods. When these cases are operated upon they usually get that kind of treatment after operation, and the question is, do not some of these surgical cases improve because of this treatment? You will often find in the report of cases that have been treated surgically with success the statement that these cases have been subjected for years to various methods of treatment without result, when the fact is that they have not been given the proper kind of treatment. However, we do not cure medically but about 50 per cent of the cases, and it is a comfort to know that surgery offers something for the other half. In cases of hemorrhage rest is all the more necessary. The ice pack may have to be suspended so that it will not touch the epigastrium. The action of cold is not always direct, but by means of reflex action, so do not hesitate to use it because you think the cold will not penetrate to the ulcer. Or you may administer 30 m. of a 1-1000 adrenalin solution. A good measure is the injection of warm water into the rectum. In case of prostration with threatened collapse saline infusion is to be resorted to. The pain may demand opiates. All patients going through this rest treatment should have warm moist applications to the epigastrium. For a perforating gastric ulcer there is no non-surgical treatment. The quicker you get such a patient on the operating-table the better. There is one method of treatment worthy of mention which is of value in the treatment of the hyperacidity so commonly associated with and perhaps causative of gastric ulcer. It is the intragastric application of the high tension, induced current, interruptions running to between 50,000 and 60,000 per minute. I have convinced myself by chemical analyses that it does decrease the hyperacidity from day to day.

THE SURGICAL TREATMENT.

Dr. John C. Morfit.—The surgical treatment of gastric ulcer has the same object that is aimed at by medical treatment, i.e., rest, but we attain this object by mechanical means whereas, in the medical treatment we arrive at it by non-operative methods. Perforation, of course, brings the ulcer into the surgical field without any doubt. As to the question of hemorrhage, I have seen two cases that were practically exsanguinated from a primary hemorrhage that recovered without any further symptoms. Primary hemorrhage does not of itself demand operation. The fact that drainage of the stomach can be so easily done has led us to do the operation too frequently. Most gastric ulcers belong to the scientific internist. We draw our conclusions too much from the work of men who operate a great deal on cases that have not had the proper medical treatment. Every case should have first the proper medical treatment. Cases that have been sent to me with a diagnosis of ulcer have more frequently gone to the internist than to the operating table. In the clinics of this country where the large statistics are given out the surgical ulcers are the cases that are brought there by men who have not had the opportunity to give the patients the proper medical treatment. Many of those cases would do as well under proper medical treatment. In a country practice where the patients cannot get the proper nursing the patients are not relieved by the medical treatment, and are sent to the surgical clinic. There is as much reason for sending a case to a hospital for medical as for surgical treatment. I recently heard a man speaking of a case which was diagnosed as either a gall-stone or gastric ulcer. The doctor cut into the abdomen, and said to the visiting gentlemen, "Gentlemen, you see the gall-bladder is in good condition, so this is, therefore, a stomach case. We classify ulcers as surgical ulcers and medical ulcers. The surgical ulcer I can readily demonstrate to you here, the medical ulcer I can not. If we do not find the broken surface we will recognize this as a medical or symptomatic ulcer." The stomach was cut open, there was no abrasion of the mucosa, and so that case was put down as a medical ulcer, that is, an ulcer in which there was no ulcer demonstrable. Gastroenterostomy was done. A similar case I saw was operated on, and later there was a return of the symptoms. The abdomen was opened, the adhesions broken up and a pyloroplasty was done. I wrote to the doctor six months afterward and inquired about this case. He told me that there was temporary relief, but that they were considering another operation. Both these operations were done by men accustomed to do a large number of gastric cases. These things make us more careful about urging surgical treatment. We are getting radically conservative. We are looking for more positive indications for oper-

ating, and operating less frequently on presumptive evidence. Surgery of the upper abdomen would go through the whole disgraceful history of pelvic surgery, but for our sad experience in pelvic surgery. It is there our various methods have been tried out and proved or discredited until we have arrived at a fairly perfect technique. Twenty-five or thirty years ago it was a rare thing to enter the body cavity. Fifteen years ago think of the number of normal ovaries removed for hysteria, and for epilepsy, etc. It was a sad experience for the patients. But that experience has given us a great deal of valuable data, and from it as we go into the upper abdomen we are getting much better results. The matter of sutures alone was worked out in the pelvis. The technique of abdominal surgery was perfected down there and now in the upper abdomen we can do necessary things with much less risk than was our experience then when we were pioneers. Therefore, I believe that gastric ulcer should be submitted to surgical treatment after good medical treatment has been tried and found wanting. It should be used in cases where there is obstruction from a contracting scar when those cases have been subjected to scientific medical treatment for a reasonable length of time. As to the method of treatment, the principles involved is to bring about drainage from the lowest portion of this viscus and the posterior non-loop operation is receiving the support of the surgical world at this time.

Dr. Louis Rassieur.—I do not like to discuss whether ulcer is surgical or medical, but since so many cases are operated upon these might be the means of advancing our knowledge of the condition if in every case operated upon we took out a gland and examined it for malignancy. If a surgeon does a resection of the stomach he ought to have it carefully examined to determine what kind of a cancer it is, and he should observe the post-operative, so that some day we might be able to give a man some intelligent opinion as to the prognosis. I believe there are some five, six or seven varieties of carcinoma of the stomach, varying in their degree of malignancy, and it would be very interesting to have this worked out.

Dr. John Young Brown.—In the last eight or ten years sufficient stomach surgery has been done by various operators of this country and Europe to enable us to draw conclusions. The indications for stomach surgery are now perfectly plain.

In a classical paper by Mayo Robson, recently published in the British Medical Journal, he clearly, concisely, and conclusively sets forth the indications for, and the results obtained in the surgical treatment of gastric ulcer. The mortality is exceedingly low in uncomplicated cases, 1.7 per cent. In over 600 operations for gastric ulcer, the percentage of complete recoveries in the hands of Robson was 95 per cent. The Mayos, who have done an immense amount of stomach surgery, report similar results. A striking feature of Robson's paper, and one which is a strong argument in favor of the early operative treatment of gastric ulcer, is the fact that he found a clear history of gastric ulcer in 39 per cent of the cases operated on for cancer of the pylorus. The Mayos report 37 per cent of their cases of cancer as giving a history of ulcer. Facts like these cannot be ignored.

No class of men have benefited more from stomach surgery than the clinicians. Surgery has taught them how little they knew of these conditions, and it is a common thing now to see medical men in attendance at various surgical clinics where work of this character is done.

The cases presented tonight were all operated on by me at the City Hospital, and all had been given a thorough course of medical treatment prior to operation. The immediate results of surgery and the permanent, curative effects of the operation are well illustrated in these cases. The third case presented, that of Hagan, is a most striking illustration of the benefits of gastroenterostomy in gastric ulcer. This man's pylorus was considerably thickened. He had a number of ulcers in that region. There was marked obstruction. I did a posterior gastroenterostomy on him, and he gained 37 pounds in six weeks. The operation was done over a year ago, and his condition, as you see tonight, is excellent. His stomach gives him no trouble, and he is able to eat almost anything he desires without trouble. The same may be said of the patient Riley. In regard to the indications for operations I do not think every case of gastric ulcer should be operated upon. I do, however, strongly think that we should arrive as nearly as possible at a correct diagnosis before any surgery is attempted. I never operated on a gastric ulcer in which the diagnosis was not reasonably certain, and in a large measure of cases have been able to demonstrate to the satisfaction of those witnessing the operation the correctness of the diagnosis.

THE latest chair for the victim of sea sickness has a movable seat vibrated by an electric motor. This is said to give surprising relief to the sufferer.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

The "Handy Man" in Medicine.

THE average city practitioner little appreciates the dexterity which his country brother has to develop as an every-day feature of following his vocation. The man of devices who is ready, give him a knife, a pine board and, possibly a piece of wire, to make you almost any kind of a splint, a truss, a support for flat-foot or another of the many appliances for which we are utterly dependent on the manufacturer—he is a creature of smaller communities. And his devices fit and do the work for which they were designed, which cannot quite so certainly be said of some of the nickle-plated, much be-padded contraptions which we buy in the city. We may have many advantages over the country physician, but there are few of these advantages which do not cost us dear. There must be quite the satisfaction in constructing a device which does its work that there is in a neat piece of surgery, or in inaugurating a line of successful medicinal therapy. We are becoming stunted and our inventive genius is being dwarfed by the fact that all we are called upon to do is to order the splint or device we want bought, construction has ceased to be in our line, and altogether too frequently we leave the fitting to the attendant in the instrument store. The ability to make a correct diagnosis is indeed the important matter in our calling, but near to it is the ability not only to indicate what is the proper remedy, but to *apply it.* The development of the spark of latent ingenuity which faintly glows in every man should be encouraged; the man who begins making things will soon find the genuine pleasure in doing it, and he will also soon find that there are many points in which he can improve on the machine-made appliances as viewed by himself and his patient. The habit of making things grows on one and becomes a most healthful recreation in many instances. Very few of the more important inventions of scientific apparatus would ever have come to us had not the inventor commenced doing things; he in all probability began with a knife and a pine board! Ours is a busy profession, and there are a few who are too busy to undertake any but their present routine, but there is a vastly larger number who may find in this suggestion that which will work to their advantage.

"God Does Not Stamp Men 'Great,' He Makes Them Prove It."

WE have been much interested in some advance sheets of the editorial department of the American Journal of Clinical Medicine; the matter is full of the vim and vigor characteristic of Dr. Abbott, and in a large degree the explanation of the great success of the journal. Under the above title Dr. Abbott tells of an English story of a "good boy," who, after going through many trials and showing great perseverance, finally achieved success—he became a *coachman!* According to Dr. Abbott, many English books and their American imitations held up to youth the ideal of modest merit, which lingered in the back seat until consequence detected it, led it before the multitude, and placed it in the seat of honor. That ideal is also a back-number. Why should merit wait for authority to recognize it. Nowadays merit pushes through the line like a football player, and proves its merit in the good old-fashioned way, by shoving weaker and less meritorious individuals aside.

The gospel of the day is Hustle. In this heterogenous mass of confused races that is being amalgamated into that wonderful development, the future American people, it is the strong, the capable, the fit, that comes to the front. In private life, in choosing the associates of an elegant leisure, modes, merit has its charms; in the battle of life, other qualities are preferable. After all, there was something in that dyspeptic, crabbed old Scotchman, Carlyle, whose studies of humanity, of men and of things, led him into a constantly increasing admiration for power and force.

Witness the scant sympathy shown to the doctor who complains that his neighbor is encroaching upon his field of practice by unfair means. Now and then complaints of this kind come before the medical societies,

when everybody excepting the party aggrieved seems to unite in the effort to ignore the difficulty and shove it into the background. Whether it is expressed or not, the feeling excited is that it is up to a man to take care of his own interests; and if he fails to do so, it is his own fault.

The struggle for existence is incumbent on every one of us and cannot be shoved off upon the community. If the other man is stealing your patients, sit down and think out the best way to stop it. We are not by any means advocating a club; it depends altogether on the man, and it may well be that repeated acts of kindness and pleasant expressions dropped here and there, will shame a man of really good feeling into refraining from such unfriendly acts. But there are men and men; and while this succeeds with some, and is always advisable when applicable, it is not uniformly so. The necessity for every man pushing, hustling, fighting, struggling and striving, to get himself to the front or the top, and to keep himself there, is one of the conditions under which Nature has planted us here on earth; and we have no possible right or reason for expecting that we should be made an exception to the universal law which governs antimate and inanimate beings.

The above comes from the pen of an aggressive, forceful man and is full of the good sense which spells success. The doctor who criticises the greater success of others and sits bewailing dull times is injuring himself; such an attitude does not attract patients, nor does it give them confidence in his skill. The realization that things are not coming one's way is the first step in remedying the fault, cool deliberation and the exercise of good judgment must follow.

The Hodgen Memorial.

ARRANGEMENTS are near completion for the Hodgen memorial, which is to be given under the auspices of the St. Louis Medical Society on Sunday, April 28, the twenty-fifth anniversary of the doctor's death. The program planned includes addresses by Dr. Joseph M. Mathews, of Louisville; Dr. Edw. W. Schauffler, of Kansas City; Dr. Chas. H. Wallace, of St. Joseph; Dr. LeGrand Atwood, of Ferguson; Dr. H. C. Fairbrother, of East St. Louis, and Charles Nagel, Esq., of this city. Physicians who were students under Dr Hodgen have been particularly invited to be present, but the meeting is open and all who are interested in doing honor to the memory of one of the greatest men who have adorned the St. Louis profession, will find a cordial welcome. While the meeting will naturally appeal to the older members of the profession it is a matter of no less interest to those who have known fewer years of medical work. The presence of a considerable number of the younger members of the profession is certain for we are quite as appreciative of the wonderful work accomplished by Dr. Hodgen and the tribute we owe him as are those who knew him in the flesh.

The State Sanatorium at Mt. Vernon.

THE Governor has submitted the following names to the State Senate as his appointees as a Board of Managers for the State Tuberculosis Sanatorium at Mt. Vernon: Dr. Wm. Porter, of St. Louis; Dr. J. L. Eaton, of Bismark; Mr. S. H. Minor, of Aurora; Mr. W. D. Craig, of Galena, and Mr. W. L. Gupon, of Montgomery. While the medical profession is pleased with the personnel of the medical appointments to this board there is not a little disappointment that the governor did not see his way to act favorably on the suggestion made by the profession that there should be three medical members. Another disappointment is that the appropriation for the sanatorium has been cut from the $125,000, which it was thought would be none too large an amount for present needs, to $60,000, and that subject to possible further reduction. This institution has been the occasion of bright hopes and many disappointments to the profession and the end is not yet.

The St. Louis A. M. A. Plans.

PLANS to make much of the excursion to the meeting of the American Medical Association are well under way, and it is thought that the trip will be, in its way, quite as interesting as that through Canada of last year, for the scenery in the Alleghenies is beautiful and the trip planned will take the party through the most interesting part. The St. Louis party is being organized to leave on the Big Four on Saturday, June 1st, at noon; this will give a daylight trip through West Virginia and Virginia on Sunday. Those who desire will be allowed a stop-off at the Virginia Hot Springs, a place known favorably to the profession and well worth a longer visit than can be had at this time. Those stopping will reach Philadelphia and Atlantic City Monday forenoon; those who go through without stop will reach Philadelphia Sunday evening and finish the trip

to Atlantic City early Monday morning. On the return trip a stop-off will be allowed at Washington, which will enable us to spend a few days at the Jamestown Exposition, going by boat down the Potomac River. Present indications are that a large delegation will attend from St. Louis and tributary territory. Reservation, both sleeper and hotel, should be made without delay. The editor of the FORTNIGHTLY will be pleased to be of service with information, or in making reservations for the trip.

The Mayor's Medical Appointments.

JUST as we go to press we learn that Mayor Wells has made his mid-term appointments, and they now await the approval of the city council to become effective. The appointments of especial interest to the profession are the following:

Health Commissioner—Dr. H. Wheeler Bond (reappointed).

Member of Board of Health—Dr. John Young Brown, succeeds Dr. Albert Merrell.

Member Board of Health—Dr. Harry Harry McC. Johnson (reappointed).

Superintendent City Hospital—Dr. Walter C. G. Kirchner, succeeds Dr. John Young Brown.

Superintendent Female Hospital—Dr. Oscar H. Elbrecht (reappointed).

Superintendent Insane Asylum — Dr. Henry S. Atkins (reappointed.)

Superintendent Quarantine Hospital—Dr. M. J. Dwyer (reappointed).

City Bacteriologist — Dr. Downey L. Harris (reappointed).

City Chemist—Thomas A. Buckland (reappointed).

Superintendent Poorhouse—William Anderson, succeeds Henry E. Hart.

The list is generally satisfactory, it contains no surprises. We will speak of it further in another issue.

THE STATE ASSOCIATION MEETING.—The meeting of the State Association occurs in Jefferson City, May 14, 15, 16, the entire first day being taken up by the sessions of the House of Delegates and the Council. The St. Louis Medical Society will have twelve and possibly fourteen delegates this year, and its representation should be many times that number. Members cannot spend three days more profitably than at the meeting of the State organization. Last year's experience emphasized the wisdom of securing hotel accommodation in advance.

GOING TO THE A. M. A.?—Better make early reservation of your room at the Grand Atlantic hotel, one of Atlantic City's largest and finest hotels. Centrally located; hot and cold sea water baths; excellent cuisine; American and European plans. Write for booklet. Chas. E. Cope, proprietor.

A NEW SYSTEM OF IDENTIFICATION.—Dr. Prager, an Austrian army surgeon, who has made a special study of the physical characteristics that may be used as means of identification, suggests a system based on variations in the conformation of the palate. He maintains that this method can be used more effectively than that founded on the finger-print principle.

THE DEATH OF DR. BUCK.—The profession is saddened by the death of Dr. T. E. Buck which occurred on the 5th. Dr. Buck has been for many years a member of the St. Louis Society and was elected to honor membership on the 23d of March last. He was a man of advanced years and his death, while not surprising to those who knew of his health, is no less distressing to his bereaved family and friends.

DELEGATES ELECTED. — Delegates were elected at the meeting of the St. Louis Medical Society on April 6th to fill the vacancy consequent to the resignation of Dr. Soper and to make out our quota should the whole membership pay their dues and give us a full representation. The six were elected in the order given here, and should the supply exceed the demand, the later men will retire in favor of those whose names appear earlier on the list: E. P. Porterfield, K. W. Millican, M. G. Seelig, J. R. Lemen, Llewellyn Williamson and O. F. Ball. Delegates are elected for two years, consequently these gentlemen serve for 1907 and 1908.

CORRESPONDENCE

BEVIER, MO., April 13, 1907.

T. A. HOPKINS, M. D., Managing Editor
THE MEDICAL FORTNIGHTLY:

Dear Doctor:—Enclosed find check for $2 for one year's subscription to the FORTNIGHTLY. As one of the City Hospital corps of '88 and '89, am interested in the hospital news and medical happenings in St. Louis generally. You will notice by the above letter head that we are trying our best to keep pace with the trend of the times in the way of "organization," as the president and corresponding secretary, myself and Dr. E. C. Grim, are St. Louis City Hospital Alumni.

Greetings to our alma mater.

Fraternally, W. P. ROWLAND.

SOCIETY PROCEEDINGS

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

Semi-annual meeting at Omaha, March 21, 22.

(Continued from page 176.)

NEPHROLITHIASIS URICA.

Dr. A. C. Croftan, Chicago, presented a very full discussion of the prevention and treatment of this condition. He said that surgery can do no more than remove the calculi or establish drainage in infected cases, but it cannot, in any way, influence the factors that determine the formation of uric acid calculi; that is, surgery can not cure nephrolithiasis. The treatment should be directed toward preventing the deposit of urates in the lower urinary passages, and with this end in view there must be considered the dilution of the urine, the total amount of uric acid and sodium chlorid in the urine, and the reaction of the urine. The patient should drink freely of water, not necessarily mineral waters, because it is the water and not the mineral it may contain that is of value. The liquid intake should exceed by far the original liquid out put in the urine. The diet should take into consideration the nuclein contents of the food, and nuclein-containing organs should be eliminated from the diet. Dr. Croftan said that albumin per se is in no way a source of uric acid. It is very important not to underfeed the patient. Dr. Croftan advised the administration of alkalies, particularly of calcium carbonate, but advises caution in its administration in infected cases.

SURGERY OF THE THYROID.

Dr. Alex. Hugh Ferguson, Chicago, in the oration on Surgery, reviewed the indications for surgical intervention in diseases of the thyroid gland, the diagnosis of enlargements of the gland, and the methods of procedure for removal of the gland which he has found to be most valuable. He said it must be borne in mind that much valuable time may be lost in the effort to perform a low tracheotomy when the gland is much enlarged, or in attempting to sever or resect the isthmus of the gland, a procedure which is uncertain in its results. It is to be preferred to incise the trachea either above or behind the isthmus, as a matter of expediency, or perhaps perform laryngotomy, and then to remove the gland itself twenty-four hours later. When the enlargement of the gland is substernal, or when it is enlarging in a downward direction, either with or without an accompanying dyspnea, operation is indicated. Tracheotomy may not afford the necessary relief in such cases. Goiters which are not limited by a capsule, or in which calcification has occurred, or that are the seat of an acute inflammation, are removed with more difficulty than are the simple goiters. This is also true of those tumors that have been exposed to the Roentgen ray, or that have been treated by means of parenchymatous injections. When the tumor compresses the trachea and esophagus, dyspnea and dysphagia occasion much suffering to the patient. In 1895 he performed a thryoidectomy because of a severe dysphagia. There was not much interference with the freedom of breathing, nor did the gland produce much external bulging. A casual look at the neck of the patient would fail to detect the presence of goiter. At the operation, however, the gland was found to be very much enlarged, and it almost encircled the trachea and esophagus. The patient was only sixteen years of age, so that the condition was all the more singular. As the result of a study of the clinical manifestations of 300 cases of disease of the thyroid in which thyroidectomy was done, he found (1) that in 77 per cent of these cases dyspnea was the principal indication for the operation. (2) Deformity in 2 per cent. (3) Dysphagia in 8 per cent. (4) Tracheal stenosis, increase in size of the gland, and discomfort, in from 3 to 4 per cent. (5) In over 2 but less than 3 per cent malignancy, suspected malignancy, the low location, bulk, and weight of the gland were the indications for operation. In 36 per cent of the cases a multiplicity of signs and symptoms was the indication for operation. These symptoms do not include cases of exophthalmic goitre.

The formation of abscesses in one or both lobes of the thyroid always is an indication for operation. The abscess is incised and evacuated, and drainage is instituted. When the tenia echinococcus finds its way into the thyroid, cysts are formed. These must be opened and drained. It is always dangerous and often impossible to remove these cysts without injuring the surrounding structures.

In considering the clinical history of these cases, we must not forget that pressure of a goiter on the trachea may cause a fatal asphyxia. Berry, in 1901, tabulated 3 cases of fatal asphyxia. It is worthy of note that in 17 of these cases no operation was done. The youngest patient was 12 years old, and oldest 30. The duration of the tumor varied from one month to twelve years. In most of the cases dyspnea had been present for a short time to twelve years. In most of the cases dyspnea had been present for a short time only, a few days to two months. The operations that failed to give relief were tracheot-

omy and larnygotomy. These cases serve to emphasize the danger in which the patient is when dyspnea manifests itself.

He has operated on 58 patients. In 44 cases of simple or cystic goiter there was no mortality. In 12 cases of exophthalmic goiter the mortality was 25 per cent. The causes of death were thyroidism in 2 cases and collapse of the trachea in one case. Four of the patients were in a very poor condition and two of these died.

GASTROPTOSIS.

Dr. Robert T. Sloan, of Kansas City, chose for his oration on Medicine, the subject of "Gastroptosis." He said that routine examination of all patients suffering from difficult digestion will reveal many cases of gastroptosis not previously suspected. The early discovery of the condition is important, because its prompt and successful treatment will prevent dilatation; moreover, the presence of this condition suggests the possibility of other ptoses not so readily recognized. The diagnosis is attended with no difficulty, except in the rare cases of very small displaced stomach. Ordinarily, differentiation has to be made only between gastroptosis and dilatation, or their coexistence must be recognized. Inflation with carbonic acid gas enables one to determine, merely by inspection and palpation, whether ptosis exists, or the capacity of the stomach markedly increased. Percussion or auscultatory percussion are of corroborative and educational value. The easiest and, to the patient, the most inoffensive way to artificially inflate the stomach is to give the patient a drachm and a half of sodium bicarbonate in solution, and follow this at successive half minute intervals with portions of an equally strong solution of tartaric acid, the administration of the latter being arrested at the slightest signs of distress to the patient. In very severe dilatation larger quantities of the chemicals may be necessary, but the acid must never be given in excess. The only objection to this method is the moderate laxative effect a few hours later, but that objection is trivial compared with the annoyance of the stomach tube to a patient lying in the dorsal position and unaccustomed to its use. When the lesser curvature is thus found to be in the epigastric area (below the ensiform cartilage) there is gastroptosis, whether or not there be a dilatation in addition. The greater curvature, in cases of gastric displacement, will be found below a point an inch and a half above the umbilicus, and may extend downward to the pelvis, but the vertical diameter is never increased in simple ptosis, unattended by atony or dilatation.

The treatment of gastroposis, when properly carried out, is usually successful, but unfortunately for the permanence of results it is difficult to prevent the recurrence of those conditions, which are recognized as possible exciting causes—and he is satisfied that we have not yet arrived at an appreciation of the chief causes. The seductive influence of corsets, belts, and similar means of constrictions of waist and abdomen, soon dissipates all recollection of the disagreeable symptoms from which the patient has been recently relieved. She early beomes tired of the abdominal exercises which have been recommended to restore and maintain the tone of the abdominal parietes, and even at the initiation of treatment, the physician's hint that perhaps an increase of intra-abdominal fat would better assist in retaining the various organs in position, is often met with a look of disgust, and occasionally a frank avowal that any increase in girth is as undesirable as the displacement.

The principles of treatment embrace: (1) The reposition of the displaced stomach; (2) administration of nutritious food, of a character compatible with the digestive power of the patient, and in small quantities frequently repeated; (3) efforts to aid the stomach in unloading itself; (4) full elimination by the emunctories; (5) massage, electricity and exercises to improve the circulation, tone up the musculature and better the general nutrition; (6) treatment of the psychical element of the associated neurasthenic state. These principles apply equally well to the treatment of splanchnoptosis, of which gastroptosis so often a very important part.

[To be continued.]

THE WILLS' HOSPITAL OPHTHALMIC SOCIETY.

A meeting of the Wills' Hospital Ophthalmic Society was held at the hospital on the 22d of October, 1906, Dr. S. Lewis Ziegler presiding.

Dr. Frank Fisher reported a case of bullous keratitis in which, after having tried various forms of treatment, he believed that it would be best to perform an iridectomy, although his experience in the past was against the procedure. Dr. Charles A. Oliver favored the operation, basing his feelings in regard to the procedure upon the good results which had been obtained by him in somewhat similar conditions. Dr. Ziegler thought that attention to the tear passages with a subsqeuent iridectomy would be the best line of therapy. Dr. Harold G. Goldberg stated that in his hands dionin

in five per cent strength solution had been of value in some cases which had come under his observation. Dr. Oliver said that this had also been his experience.

Dr. Fisher exhibited an interesting case of traumatism from a fragment of tool or coal which had been inflicted two weeks previously. The foreign mass had torn through the lower outer corneal edge and ciliary region of the right eye. There was a localized opacity of the crystalline lens and adjacent capsule in the wounded area. Intraocular tension was normal. The case being a new one in the hospital, it was the consensus of opinion of those present that the X-ray should be immediately used and attempts made, if possible, to remove the foreign mass, do an iridectomy, and remove the lens; the case to be reported upon at the next stated meeting.

Dr. Oliver exhibited a curious type of traumatism in which the corneo-scleral limbus and the underlying iris had sustained a clean cut incision from a large piece of steel that had not penetrated any further into the eyeball. The two flaps of the wound were situated upon different planes and levels. The anterior chamber was closed. There was no reaction. The wound healed. Radiorgaphs failed to show the presence of any foreign body in or around the eye, and the patient recovered with the restoration of the parts to their normal position with a scar which was only visible by strong concentration of light and high magnification. There was full vision and large uninterrupted fields. Treatment has been limited to the use of iced compresses, atropine, and rest in bed.

Dr. Oliver showed a case which he had seen two hours after an accident, and in which a drop of eserine had been instilled, carrying a small iris prolapse back into its normal position, and giving a round pupil without any appearance of traumatism other than a small slightly concentric vertical cut through the cornea. The following day, the patient reported with a localized iritis, a spongy deposit upon the anterior capsule of the lens, and a deep mass of lymph in the bottom of the anterior chamber. Vision was reduced from practically normal to light perception. The patient was immediately admitted to the hospital and placed in bed. Hot compresses were employed, and changeable iridoplegics and cycloplegics were used. All of the signs of inflammation subsided, and the patient one week after he had been injured, recovered with full acuity of vision —two small posterior synechia in the position of the previously bruised iris alone remaining. He brought the case before the society to illustrate a principle which he and Dr. Fisher had established in their hospital services a number of years ago—to immediately excise all prolapses of the iris tissue, no matter how small or recent they might be. Dr. Fisher agreed with Dr. Oliver in reference to the advisability of such a procedure, and had made an unalterable rule to do this in all cases of this kind since the time mentioned.

Dr. Ziegler spoke of a case with the history that a piece of steel had been driven into the eye several years previously, cataract developing. The patient had been in the hands of a practitioner who had failed to make use of X-ray study. The moment that Dr. Ziegler saw the case, he ordered radiographs to be made, with the result that a foreign body within the eyeball was recognized. The mass was immediately removed, the cataract extracted and vision with glasses was brought to almost normal; thus proving the direct advantage of X-ray study in every supsicious case.

Dr. McCluney Radcliffe made mention of a case in which two sets of negative studies with the X-ray had been made in spite of the fact that he felt sure clinically that a foreign body was within the eyeball. A third series of plates gave an undoubted shadow with its localization. Immediate operation was resorted to, and a foreign body was sucessfully removed, leaving an useful and unirritated eye. The foreign body was two millimeters square in size. He also spoke of some rare types of traumatic cataract in which there was not any apparent external wound. In two cases that he had seen, the character of traumatism was extremely slight, one being the result of the shaking of a piece of light dress goods in which a closed eyelid was struck, and in which a resultant cataract was most probably caused by capsular breakage.

Dr. Oliver gave a brief account of a case that he had seen two weeks previously, in which the findings of a carefully made X-ray study coincided exactly with those from a series of examinations of the visual field; it being his rule whenever possible, to have the field of vision gone carefully over by a competent assistant. In this instance, a peripherally situated scotomatous area of positive type, sharply cut in outline, made him feel that either a small scetor of the optic nerve had been injured or the adjacent retina had been seriously wounded. The foreign mass, a piece of steel some fourteen millimeters in length, most accurately located by Dr. William W. Sweet, showed that its posterior extremity was protruding through the posterior portion of the eyeball some two millimeters to the temporal side of the globe, and that it had cut the optic nerve in actua

relationship with the lost portion of the field. An incision in the proper place being made, the foreign body was withdrawn upon the first essay of the magnet.

An informal discussion upon the use of iced compresses in cases of traumatism both accidental and purposive, gave some interesting facts in regard to the first establishment of this form of practice in the hospital. Drs. Fisher, Oliver, and Ziegler related some details as to their difficulty in overcoming the many objections offered to the plan that they had encountered during the introduction of a method which is now so universally employed in the hospital, and which has met with so much success.

Dr. Goldberg gave a very carefully detailed account of a number of bacteriologic experiments which he had made with several different makes of cosmoline. As one of the results, he had found among a great number of experiments, that certain kinds of cosmoline seemed germ free. His work pursued with alkaline, acid and neutral materials, gave findings which induced him to cover eyeballs that had been opened by traumatism with large masses of the germ free variety of drug. As a result, it is in his belief, that these types are of value in the treatment of open eye wounds, protecting from the entrance of extraneous and harmful bacteria. He has now advanced sufficiently in the work as to make clinical studies, some of which are in active progress. Thus far he has found that healing is more perfect and much more prompt with the use of the material than it with other methods. In a number of his cases he had noticed that the patient has experienced the taste of the drug. Dr. Ziegler made mention of the fact that he had seen the drug employed empirically by others, and that he remembered that Dr. William F. Norris formerly used it to advantage in the hospital. Dr. Oliver substantiated Dr. Ziegler's second statement, as he had often seen Dr. Norris successfully employ the then so-called refined makes of the material in many serious cases.

Dr. Ziegler gave a brief history of a case of melano-sarcoma about as large as a small bean situated at the corneo-scleral junction of the left eye of a middle aged man in whom six months previously, the growth appeared as a minute pigmented plague. When the case was first seen, the patient had been advised immediate excision of the growth. At present the mass is lobulated, densely pigmented, and covers one-third of the cornea. The eyeball is involved and there is considerable injection. Just beneath the principal growth there is a small carnified nonpigmented mass which presses into the lower lid.

Dr. Goldberg showed a number of specimens of several types of sarcomata in various stages and in different positions, giving brief histories of the same.

Attitude of the Filipinos Toward the Leper Hospital.—Dr. Heiser, chief quarantine officer, reports that a remarkable change seems to have come over the people in reference to their attitude toward the leper hospital. It is almost a daily occurrence for persons to apply voluntarily to the bureau of health for hospitalization. Many individuals have come from the colonies and requested that they be admitted to San Lazaro Hospital until they could be sent to the Culion leper colony. These facts, Dr. Heiser states, are significant and point to an improvement in the attitude of the people.

Experiments with Saltpetre.—A series of experiments to determine the effect on the organism of saltpetre in foods is to be held under the aupsices of Prof. H. S. Grindley, University of Illinois, Professor R. H. Chittenden, of Yale; Professor J. J. Abel, of Johns Hopkins, Professor A. P. Mathews, of, Chicago University, and Professor Edmund J. James of the University of Illinois. A squad of healthy vigorous men will for a period of from six to twelve months, be fed upon meats cured with saltpetre, while another similar squad will be fed upon meats without any preservate. The conditions of both in other respects will be equal, both parties being lodged in a house especially equipped for the determination and analysis of the food consumed by each man of the squads, and for noting the progress of his physical condition.

Inconsiderate Therapeusis. — Fitting treatment to a patient's ability to avail himself thereof is one of the marks of the successful physician. We have here another sample of inconsiderate therapeusis, which we quote from The Practitioner. The treatment was given to a hawker, an out-patient, at a hospital, clothed in filthy rags, who earned a few pence daily in the streets: 1. Avoid fatigue, damp and cold. 2. Clothe very warmly; wear flannel next the skin. 3. Feed well: underdone meat, 7 to 14 ounces a day, to be taken in cold bouillon after it has been scraped and then pounded in a mortar, or as balls in powdered sugar. Raw or very lightly-boiled eggs (four to six, and if possible, eight to ten a day). Sardines in oil (two daily), butter, water cress, cooked and raw. A large cup of cocoa with milk in the morning. Beer to be drunk at meals.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

The Diagnosis and Medical Treatment of Graves' Disease and Hyperthyroidism.—Stengel (Penn. Med. Jour., Dec., 1906) discusses the subject of hyperthyroidism at length. He deducts the following conclusions: 1. The syndrome of hyperthyroidism, which is met with in most characteristic form in typical Graves' disease also attends mild and often transient enlargements or other pathological lesions of the thyroid gland. While distinguishable for ordinary Graves' disease by accurate diagnosis, and while as a rule entirely different in their clinical course and prognosis, these cases must be included with Graves' disease under the more general heading hyperthyroidism, because, in any case, a gradual transition and termination in a severe form is possible. 2. Hyperthyroidism is due to an increased and perhaps perverted secretion of the gland, and is, therefore, promoted by increased vascularity of the gland and hypertrophy of its secretory structure. Methods of treatment designed to reduce vascularity of the gland or to limit secretion functionally or by actual destruction of glandular substance should be investigated hopefully. 3. General medical treatment, including change of scene, rest, diet and tonics often benefit milder cases, and may mitigate symptoms even in the severer forms. Iron and arsenic, digitalis, strophanthus and convalaria; atropin, ergot and mild currents of faradic or galvanic electricity are useful respectively in improving the blood, the general and local circulation. 4. Iodine is a dangerous drug, and thyroid extract should not be employed. In some cases of Graves' disease seemingly good results from the use of thryoid extracts have been reported. The explanation of this is difficult. 5. Three forms of specific treatment have been suggested: (a) By the production of antitoxic substances; (b) by the preparation of cytolytic substances, and (c) by the use of X-rays. The statistical evidence in favor of the antitoxic sera, such as antithyroidin of Mobius, the milk of thyroidectomized goats and the like, is very encouraging, but cannot yet be fully accepted. The results obtained with the cytolytic serum of Rogers and Beebe are equally or even more encouraging, and the treatment seems to rest upon a scientific basis. The methods of preparing the serum, however, require refinement and elimination of certain defects. The X-ray treatment has not been sufficiently used to justify a final expression of opinion as to its merits.

The Roentgen Rays in Chronic Bronchitis.—Schilling (Semaine médicale, No. 38, 1906) remarks on the good results with the X-ray treatment in chronic bronchitis. His first patient upon whom the rays were applied evidenced a complete cessation of expectoration during the evening of the day of the exposure. The other symptoms also showed signs of mitigation, and after five weeks the dyspnea had entirely disappeared and the patient expectorated less in a week than he had previously raised in a day. The author was so favorably impressed with the good effect in this case that he employed this routine method of treatment in several bronchitic patients with good results. Exposures lasting from six to fifteen minutes suffice to bring about the desired effect. Both halves of the chest were exposed, except where the bronchitis was unilateral. Schilling maintains that good results from radiotherapy almost immediately manifest themselves in chronic bronchitis, and continue as long as two or three months in some patients.

The Prognostic Value of the Diazo Reaction in Tuberculosis.—Williams (Med. Rec., Mar. 23, 1907) is in the habit of making a complete urinary analysis in every case of consumption, and one thing he especially looks for is the Diazo reaction, as he believes its presence or absence is a good prognostic guide. He holds that the absence of the reaction in white patients is of favorable prognostic value, while in colored patients, on the other hand, the absence of the reaction is of no prognostic import. A positive reaction in white patients is of unfavorable prognostic value.

Pulsus Paradoxus in Pericarditis with Effusion.—Calvert (Jour. A. M. A., April 6, 1907) says from a clinical point of view pulsus paradoxus should be a sign of the existence of its cause, and the importance of this sign must depend on the nature of pathologic condition. From a diagnostic point of view a paradox pulse is not of especial differential importance, but as it does not exist throughout the entire course of a given clinical picture, pulsus paradoxus heralds the development of a stage in the clinical course of the disease. The author studied the cadavers of two individuals who had pericardial effusion at the time of death and from these he attempts to show the physical explanation of a paradox pulse and its significance in cases of pericarditis with effusion. He illustrates his article with several photographic sections

His summary is as follows: 1. Pericardial effusion produces stenosis of the venae cavae. 2. This stenosis is relatively compensated by a rise in the venous pressure. 3. This compensation fails when the pericardial pressure is greater than the venous pressure. 4. Owing to respiratory change in venous pressure the degree of broken compensation varies in inspiration and expiration—greatest in inspiration, least in expiration. 5. The variation in compensation carries varying quantities of blood to right heart (and to general circulation), least in inspiration, greatest in expiration. 6. The respiratory variation in quantity of blood passing to general circulation is sufficient to explain pulsus paradoxus.

The Liver in Cardiac Disease.—Solomon (Lancet, Jan. 5, 1907) bases the assertion, that while the liver is a factor of the greatest importance in the formation and course of edema in cardiac disease, it is not the only one, on a study of sixty cases. He holds that under conditions of cardiac stress the liver will draw off a large volume of blood from the right auricle, and after a certain time changes take place leading to fibrosis, which very naturally affects the distensibility of the liver. The fibrotic process, by increasing the forces of the liver's recoil, prevents the use of the latter as a reservoir, in which the blood may accumulate. In complete compensation there are no engorgement of the liver and no back pressure, and while the liver may be looked on as a sponge-like safety-valve to the heart, continued use of this safety-valve action leads to its own abolition.

A New Saccharometer.—Walbum (Deutsche Medizinische Wochenschrift, No. 11, 1907) propoess a simple and accurate apparatus for a rapid percentage estimation of sugar in the urine. The apparatus consists of a graduated tube (titration tube) and two small drop bottle designed for the purpose of diluting the urine 1:1 and 1:9 respectively. The analysis is made as follows: Five cc. each of solutions one and two of Fehling's solution are respectively placed in the titration tube by means of a pipette. The solution (Fehling's) is then heated until it simmers and about one cc. of the diluted urine (1:1) added in a drop manner whereupon the whole is again heated to the simmering point. Precipitation is complete when the color of the supernatant fluid is either a faint yellow or colorless. As long as the fluid above the sediment is blue or a bluish hue urine must be added in drop quantities. When the point of complete precipitation has been reached the titration tube is held under the open water faucet and cooled. The percentage of sugar in the urine corresponds to the height of the sediment on the right side of the scale of the tube. For urine containing more than three per cent of sugar the flask containing the dilution 1:9 is used and the figures on the left side of the titration tube utilized when estimating the percentage.

The Nature of Herpes Simplex and Its Diagnostic and Prognostic Significance in Various Infectious Diseases.—Schamberg (Jour. A. M. A., March 2, 1907) says that herpes zoster and herpes simplex—both the facial and genital varieties—while not clinical identical, are closely related. The histology of the cutaneous lesions and the observed changes in the nerve structures examined appear in all to be practically the same. It is highly probable that the vast majority of all cases of herpes of the various types are the result of the action of a toxin. This proposition necessarily assumes the infectious origin of herpes. The frequency of herpes simplex in certain infectious diseases and its rarity in others is evidences that the toxin must possess certain peculiar qualities in order to exercise a selective affinity for sensory nerve structures. The toxins producing herpes simplex and herpes zoster are in all probability not the result of the action of any specific microorganism. This is certainly true of the former and by analogy may be assumed to be true of the latter disease. The three diseases in which an "herpetogenic" toxin develops with a fair degree of constancy are pneumonia, spotted fever and malaria. Its frequency in these diseases and its comparative rarity in typhoid fever and in other infectious maladies make its appearance a symptom of considerable diagnostic import. In view of the tendency of certain individuals to recurrent attacks of facial herpes from slight indisposition the fact as to such a history should always be elicited before according to herpetic outbreaks the diagnostic value referred to.

Thoracic Pulsations in Pleuritic Effusions.—Livierato (Gazzetta digli ospen, No. 144, 1906) details the history of two cases of empyema exhibiting a pulsation of the entire thoracic wall, together with an analysis of sixty-four similar cases recorded in literature. In all the cases, excepting four, the exudate was left-sided with considerable cardiac displacement. The exudate was of a purulent character in all save six cases, the latter being of a bloody serous nature. The main factor in the production of a pulsating thorax in pleuritic effusions is a large exudate under increased pressure with tense thoracic walls. Additional supporting moments which come

into play are compression of the lung, atelectasis, expansion of the pericardium and mediastinal septum, diminution in the resistance of the thoracic wall, particularly in young persons, relaxation, atrophy and paralysis of the intercostal muscles.

Pre-Icteric Itching.— Reisman (American Medicine, Feb., 1907) gives a literary resumé of the subject and details the history of three cases of pre-icteric itching which recently came under his observation. The following are his conclusions: 1. Itching sometimes precedes the onset of jaundice by a variable length of time. 2. This itching may cease the moment jaundice is established, or it may continue indefinitely. 3. Itching, whether pre-icteric or icteric is not due to a deposit of bile pigment in the skin. 4. When itching exists for which no cause can be found, the liver as a possible factor should not be overlooked. 5. Pre-icteric itching is suggestive, though not pathognomonic, of the existence of malignant diseases involving the liver or biliary passages.

Blood in Asthmatics.—Solecher (Meunchner Medizinische Wochenschrift, No. 8, 1907) analyzed the blood of asthmatics and found that during and immediately after an attack an increase in the percentage number of leucocytes, the increase being solely at the expense of the polymorphonuclear variety, while the mononuclear, and particularly the eosinophile cells showed a decrease. During the free intervals, on the other hand, the percentage of polymorphonuclear cells sink as low as forty-five per cent, while the eosinophiles markedly increase.

OTOLOGY.

ALBERT F. KOETTER, M. D.

The Normal Movements of Respiration of the Tympanic Membrane.—A. Balla Archivio ital. di otologia.)—Referring to a case of respiration movements in a drum membrane with scar tissue, and with regard to the different statements as to the coincidence of the inspiration and expiration with the inward and outward bulging of the membrane, author emphasizes the influence of the nose and mouth breathing. In breathing through the mouth (on account of obstruction in the nose) we find with the inspiration an aspiration of the air in the nasopharynx, consequently a rarefaction of the air in the tube (contraction of the membrane) taking place. The contrary occurs in the expiration. Is the nose clear, that means that the patient can breathe through the nose, the bulging occurs with the inspiration, the contrary with the expiration.

Old and New Points Regarding Adenoids. —Lange (Copenhagen, Monatsschrift fuer Ohrenheilkunde) who was for many years assistant to Meyer the discoverer of adenoid vegetations, expresses the view that important as was the discovery of his honored teacher, so faulty was his method of operating (with the ring knife through the nose), it was but proper that Gottstein's method should have become so popular. On the other hand, Lange thinks that too much operating is being done; he uses great care in deciding which cases should be operated, and which can be treated in other ways. He grants that there are cases where it is not always possible to remove all the tissue. To speak of recurrences of the vegetation is wrong, all the tissue had not been removed in these cases. Not everybody can perform the operation properly. First condition is an exact diagnosis by means of a digital examination, and here even an expert may reach different results, as sometimes the tissue appears large on account of inflammatory processes. Lange no wturns to the question as to why the operation, although done in the proper manner is in some cases without results. The answer is because there is present in the nasopharynx a hypertrophic catarrh, that may be improved somewhat by the operation, but still continues to exist. Meyer treated this condition with nitrate of silver caustic, but this was soon abolished. Today this is recklessly treated with knife and scissors, causing the mucous membrane to lose its elasticity and freshness. Lange has observed in children, in spite of careful operation, in which better breathing through the nose was obtained the adenoid habitus continued, he found the explanation for this in the nervous system, and the therapy used by him, arsenic and iron, had the desired result. The enuresis of children for which the adenoids are often blamed, Lange considers a neuropathic condition entirely independent of the adenoids. Of fifty cases of enuresis he found only eight cases of adenoid vegetation, three cases of hypertrophic retronasal catarrh, three times a minimum enlargement of adenoid tissue and in thirty-six cases the nasopharynx was perfectly clear. The eight cases with adenoid vegetation were all operated, without the operation having any permanent influence on the enuresis with the exception of one case which was doubtful. Thus Lange had 49 children without adenoids, but with enuresis. He had the impression that the disease occurs mainly in nervous children, and that these belong to a group of children with adenoid habitus

minus the vegetations, and a therapy directed to the nervous system is in order.

A Case of Profuse Discharge of Cerebro-Spinal Fluid from the External Canal with Uninjured Membrane —Lewin (Allgemeine medizinische Zentral Zeitung.)—Girl of fourteen has noticed that for about two weeks a large amount of clear fluid flows from the left ear, approximately three liters daily, now in continuous stream, now drop by drop. Three days before this discharge commenced patient struck left side of head against edge of stove, this was followed by headache, vertigo and pain in the ear. Walls of external canal swollen, especially anterior wall also congested; membrane lusterless, relaxed and moist. Above the short process of the hammer mass of epidermis that can neither be removed by syringing nor by the curette. No rupture of the membrane, no hemorrhage. Impaired hearing in the left ear. A tampon introduced into the canal is saturated in ten minutes. During the whole time patient was under observation place of exit of fluid could not be found, but at each examination a moist reflex was noticed above the short process, and author believes that this is the point of exit. On the eighth day, three weeks after its inception the discharge ceased. No signs of hysteria. The suspicion of artificial introduction of the fluid was abandoned because the patient was continually under observation. The analysis of the fluid was as follows: Specific gravity 1003, albumen 0.05%. As a cause for this condition we must blame the trauma; very likely we are dealing with a fracture of the base of the skull at the superior wall of the canal, the point of fracture being hidden on account of the swelling of the walls. The case is remarkable on account of the membrane being intact, and above all the large amount of fluid, three liters daily, without any disturbance of the general condition of the patient, without disturbance of assimilation, or on the part of the nervous system.

Reports on Otitic Dyspepsia in Infants.—(Kishi, Japan, Archiv fuer Ohrenheilkunde). —The otitic dyspepsia in infants is not such a rare disease. Kishi observed fifteen cases in a half year, of which he reports the history in the work reviewed. To the well-known symptoms he adds the two characteristic appearances he found in his experience, namely enlargment of the liver and gritting of the teeth. Enlargement of the spleen he could demonstrate clinically in but three cases of the fifteen. The tympanic membrane did not show severe signs of inflammation, but considerable dullness and bulging. The otitic dyspepsia is due, according to Kishi, to the poison entering the digestive tract through the Eustachian tube from tympanic cavity.

Nasal Tampons.—Hanselman, Kiel (Monatsschrift fuer Ohrenheilkunde) does not consider nasal tampons judicious and to check hemorrhage, viz., causes formation of thrombi of severed vessels by use of perhydrols. For more than a half year he has not used the tampon, and regards it only as a last resort. He admits that he encountered secondary hemorrhage, but this could be controlled by the patient to whom he always gave 30 g. of a 3% solution of perhydrols to use in case of bleeding at home.

Therapeutic Attempts to Heal Cancerous Swellings by Use of Anesthesia.— Spies (Muenchener medizinische Wochenschrift) acting on the thought that without sufficient supply of nourishment nothing can exist in organism and cannot show a strong or excessive growth, and instructed by the clinical fact of the stronger growth of the larynx carcinoma after local, especially galvano-cautery treatment, Spies through anesthetizing, through exclusion of the irritation coming from the tumor, the reflex hyperemia, the condition necessary for a rapid growth, suppressed. The experiments on animals, mice carcinoma, showed good results, viz, healing when dealing with slow growing tumors and when treatment was inaugurated early. As anesthetic Spies used nirvanin (Hoechst) in 5% solution, injected into the surrounding tissue of the tumor in doses of 0.5 ccm. every two or three days. In private practice he experimented on eleven cases of malignant tumors. Setting aside one case each of carcinoma of the external nose and of the lip, these were all carcinoma or sarcoma of the upper air passages. The results were partly negative, partly encouraging in so far as the injections mitigated the subjective symptoms or decreased the size of the tumor through encouraging disintegration. One lymph sarcoma of the right tonsil disappeared entirely, of course with the aid of arsenic.

A Rare Disease of the Faucial Tonsil.— Hasslauer (Archiv fuer Laryngology) reports this case as the first one of herpes involving only the faucial tonsil. The tonsil was considerably enlarged so that only the lower third of the posterior nares was visible. The surface was severely congested and covered with numerous vesicles the size of a pinhead, containing partly clear and partly opaque fluid. At the same time there existed a herpes of the upper lip and the entrance of the nose, which verified the diagnosis, and furthermore the course of the disease made it conclusive. After rupture of the vesicles

leaving a superficial erosion and formation of a thin grayish-yellow pseudomembrane covering the entire faucial tonsil, reminding one of diphtheria, complete recovery took place. The faucial tonsil was reduced to a flat elevation. The therapy consisted of daily syringing of the nose with permanganate of potash followed by insufflation of zincsozoiodolicum into the nasopharnyx.

Pain in the Throat Due to Disease of the Glands on the Floor of the Mouth.—Kretschmann (Archiv fuer Laryngologie) refers to the fact that a great many patients complain of indefinite pains in the throat and the customary examination reveals no cause for the pain. Author not seldom found in such cases a diseased condition of the glands of the mouth. He then gives an exact topographic-anatomical description of the glands involved, namely, the submaxillary, sublingual and the submaxillary lymph glands. To recognize these changes he recommends the bimanual examination, with a little practice one can easily detect enlargements and painfulness of the glands in comparison to the health side. The acute process is characterized by severe pain and rise in temperature. But most often we deal with chronic affections, explained as pain in the ear, burning and dry sensation in the throat, pain on swallowing. It is interesting to note that in several cases the symptoms similated a typical picture of globus hystericus. The submaxillary is the gland most frequently involved. The disease is rare in childhood. Etiologically, from the multitude of bacteria in the mouth, the bacteriological influence plays the most important part, supported by the disposition. The treatment consists of salicylate preparations internally. Externally tincture iodine and bimanual massage.

BALLOONING BY MOONLIGHT.—Ballooning by moonlight is sport for the gods, declares the Countess Grace di Campello Della Spina, a member of the Roman Aero Club and a balloon traveler of experience. "The strange sense of being disembodied, of flight without movement, of rapid travel, of motionless suspension in mid-heaven, of solemn silence, without oppression, makes a new environment for the heart of man." Readers of the May Century may read the Countess's own account of one of the most interesting of her experiences, a voyage by full moon, from Rome over the Appenines to near San Severino. The balloon trip was only nine and a half hours; but it took no less than twenty-four hours of railway travel to carry the party back to its starting point.

PASTEUR INSTITUTE IN ST. LOUIS.—A Pasteur Institute, for the free treatment of hydrophobia, has been established at the city bacteriologist's office in the City Hospital. Dr. Downey L. Harris is in charge of the institute, for the use of which five rooms have been assigned.

PRIVATE HOSPITAL.—Dr. J. Howe Adams has opened a private hospital on the southwest corner of Twenty-fourth and DeLancey streets, Philadelphia. The hospital consists of two commodious, sunny, detached buildings in a quiet, convenient section of the city. Both medical and surgical cases will be admitted.

OPEN AIR HOSPITAL SITE.— Extensive plans are being arranged for the care this summer of tuberculosis victims in an open-air camp. Sunday afternoon was spent by Edward F. Goltra, of the St. Louis Society for the Relief and Prevention of Tuberculosis, inspecting sites near Webster Groves, St. Louis County. The present plans of the society call for a main hospital structure for the accommodation of the medical staff which will be in charge of the work, with several buildings of lighter construction for the use of patients. Among the societies interested in the work, which have donated tents are the Sunshine Society, the Ladies' Aid of the First Congregational Church, the West End Charity Circle and the Wednesday Club.

MEDICAL SOCIETY MEETINGS.

American Medical Association, Atlantic City, N.J. June 4-8.
Amer. Confed. Reciprocating, Exam. & Lic. Bds., Chicago, April 30.
Assn. of American Medical Colleges, Washington, May 6.
American Association of Genito-Urinary Surgeons, Washington. May 7-9.
Amer. Therapeutic Society, Washington, May 4-7.
Amer. Assn. of Pathologists and Bacteriologists, Washington, May 7-9.
Amer. Gynecological Society, Washington, May 7-9.
Amer. Climatological Assn., Washington, May 7-9.
Amer. Laryngological Assn., Washington, May 7-9.
Amer. Medico-Psychological Association, Washington, May 7-9.
Amer. Ophthalmological Society, Washington. May 7-9.
Amer. Orthopedic Society, Washington, May 7-9.
Amer. Pediatric Society, Washington, May 7-9.
Amer. Assn. of Physicians, Washington, May 7-9.
Amer. Surgical Association, Washington, May 7-9.
Nebraska State Medical Society, Lincoln, May 7-9.
Texas State Med. Assn., Mineral Wells, May 7.
Utah State Med. Assn., Salt Lake City, May 7-8.
New Mexico Med. Assn., Las Cruces, May 8-9.
Kansas State Med. Society, Kansas City, May 8-10.
Missouri State Medical Association, Jefferson City, May 14-16.
Illinois State Medical Society, Rockford, May 21-23.
Iowa State Med. Society, Cedar Rapids, May 15-17.

FAVORITE PRESCRIPTIONS

PAINLESS BLISTER.—

℞ Mentholis.....
Chloralis.....aa gr. xx
Ol. theobrom..... 3ss
Spermaceti..... 3i
M. ft. past. S. Apply.

URTICARIA.—In nervous patients the following is usually effective:

℞ Liquoris potassii arsenitis.. *m*xxiv
Potassii bromidi..... 3iv
Syrupi aurantii corticis..... f3iv
Aquae, q. s. ad..... f3iij
M. Sig.: Teaspoonful three times a day.

GONORRHEAL RHEUMATISM.—W. J. Robinson, in an abstract in Merck's Archives, states that if after getting rid of gonococcus there is evidence of involvement of the joints, the following combination is recommended as a local application:

℞ Acidi salicylici..... 3i
Mentholis..... gr. xv
Guaiacolis..... 3ss
Alcoholis..... f3i
M. Sig.: To be painted over the affected areas with a camel's hair brush and the parts covered with cotton and oil silk.

Or, as a liniment, the following:

℞ Methyl salicylatis..... 3ij
Guaiacolis..... 3i
Olei veratinea.....
Linimenti camphorae.....aa f3i
Linimenti belladonnae..... f3i
M. Sig.: Rub in well and cover with cotton and oil silk or muslin.

As an ointment the following composition:

℞ Chloralis hydratis..... 3i
Camphorae—Mentholis.....aa 3ss
Acidi salicylici.....
Guaiacolis.....aa 3i
Atropinae..... gr. ij
Petrolati..... 3i
Lanolini, q. s. ad..... 3ij
M. S.: Apply externally.

SURGEON'S ECZEMA.—By reason of much hand-scrubbing, long continuance of the hands in fluids and exposure to cold air before perfect drying, the hands of busy operators are apt to become sore from a kind of dry eczema, especially in very cold weather. Applications of vaseline camphor-ice each night will prevent this; so also the use of the following:

Phenol..... 5.00
Oil of cade..... 10.00
Lanolin.....500.00
Oil of rose..... q. s.

This is to be well rubbed in each night, with especial attention to palmar surfaces.—Am. Jour. Clin. Med.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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CLINICAL THERAPEUTICS

A forum of original experience, to which scientific contributions are invited. Responsibility for views promulgated limited to author.

"Spinal Cord Complications of Anemia."—With increased knowledge of the anatomy and physiology of the brain and spinal cord, there is a growing opinion among careful clinical observers that many of the nervous phenomena accompanying general anemia can be directly attributed to resulting changes in the nervous system. The spinal cord complications of pernicious anemia have been recognized for some time, and it is no uncommon thing in these cases to find pronounced degenerative areas throughout the cord. The posterior columns and occasionally the lateral are most often involved, the nerve fibres being chiefly affected, without however, the extreme shrinking usually observed in locomotor ataxia. While there can be no doubt that these conditions depend to a certain extent on the blood changes incident to the anemic process, it is more than probable that the toxins

resulting from the attending hemolysis exert direct injury on the nerve cells. Fortunately the ordinary anemias are not attended by such extreme changes, and the resulting symptoms, with their speedy control under appropriate treatment, point to a functional rather than an organic origin. These symptoms, while extremely variable, usually consist of constant and pronounced backaches, especially in the cervical and dorsal regions, sensitive areas along the spinal column, variations in the spinal reflexes, paresthesias generally, and oftentimes irritability of the anal or vesical sphincters. Headache is frequently complained of, although the patient is usually able to sleep. The symptoms referable to the sexual function are also extremely variable, especially in the female, and range all the way from absolute frigity to positive nymphomania. Frequent reference is made to the heart by these anemic patients, and while their symptoms may be somewhat due to the changes in the blood current, there can be no question that the sympathetic nerves suffer in the general involvement of the nervous system, and may therefore be directly responsible for the arythmia, tachycardia, etc., so often complained of. The great therapeutic value of pepto-mangan (Gude) is well shown by its rapid and pronounced action in these cases of anemia complicated by nervous derangements. With the rise in hemoglobin and the blood count, which immediately follows the administration of pepto-mangan (Gude), the backaches and headaches cease, the sensory disturbances disappear, and the patient's nervous system rapidly returns to the normal. The comparative ease with which these cases are restored to health when thus treated, will be exceedingly gratifying to the zealous practitioner. He, more than any one else, realizes the danger of letting young females thus afflicted drag along indefinitely, for he knows that the psychic influence of long continued sensory disturbance is extremely prone to develop and magnify any hysterical tendencies however latent. Early and efficient treatment is therefore not only desirable but urgently necessary, and pepto-mangan (Gude) will never prove disappointing.

A Case of Syphilitic Debility.—(William A. Wood. M. D., Gallatin, Mo.)—It is not an unusual event to meet with a case, more especially of a young female of delicate constitution, in which syphilis has attacked the lungs and brought about a certain amount of debility as well as of comparative emaciation which leads all to look upon her as a victim of pulmonary tuberculosis and destined to fill a grave in a short time. The ravages of syphilis are not always such as have been depicted by fervid but misguided imaginations. The leutic process very often attacks the deeper tissues in a very insidious manner and the victim of the tertiary stage of the disease may be such without ever having been aware of the primary or secondary stages. These are the cases which may very properly be included with those of syphilis insontium or of the innocent, and their very ignorance is but too often the cause of the ravages caused by the disease. I very well remember just such a case which I was called upon to treat by the mother, who herself was a robust healthy woman. Her husband, the father of my patient, died but six months after her birth of sudden debility, as it was expressed to me. The family history was negative and, of course, no history of syphilis could be elicited. Under these circumstances it was necessary to arrive at a diagnosis by exclusion. Tuberculosis was shown not to be present and every other pathological process was excluded with the exclusion of syphilis whose existence remained a possibility. The condition of the lymphatic ganglia confirmed this, so she was accordingly placed upon iodide of potassium. This did not agree well with her and it was resolved to place her on the iodide and cordial of the extract of cod liver oil compound (Hagee). The iodide was administered in the cordial before each meal, and the results were not only good, but the improvement was noticed by all her friends. The specific action of the iodide, to which was added the tonic action of the cordial was such that, in three months, my patient had perceptibly gained in weight. It is now a year since the first treatment was begun, and she is the picture of health and feels fine. The cordial is still taken, from time to time.

Colds and Coughs.—The perfectly normal individul rarely suffers from colds. Whether the bronchi or nares are affected retention and congestion are sure to have existed. Prompt purgation and stimulation of the liver with small doses of calomel and podophyllin followed by a saline draught, the exhibition of the sulphocarbolates and a few doses of calcium sulphide, quinine and aconitine (or atropin) will, together with local cleanliness, put a prompt end to "cold in the head." The same basic treatment and the exhibition of the indicated remedy will as promptly stop coughs. An excellent formula in bronchitis is iodoform 1-21, codeine sulphate gr. 1-24 and emetine gr. 1-67.—Dr. Abbott in Clinical Medicine.

WALK worthy of the vocation wherewith ye are called.—Bible.